

### **REMARKS/ARGUMENTS**

Claims 1-9, 11, 12, and 17-20 are pending. Claims 10, 13, 16, 21 – 24 are cancelled, without prejudice. Claim 25 is supported on page 4, lines 4 – 15 and on page 6, lines 4 – 14. Claims 26 and 27 are supported on page 4, lines 29-30.

Claims 1 and 14 are amended to clarify the subject matter of the invention. This amendment is supported on page 3, lines 26-28.

Claims 3 and 17 are being amended for purposes of clarity and antecedent basis. This language is supported on page 11, line 21. These changes do not narrow the scope of these claims.

No new matter is added by this amendment.

#### **Statement of Common Ownership**

The present application and Wilson et al, US Patent 5,856,152 were, at the time the invention of the present application was made, owned by the University of Pennsylvania and all of the inventors were subject to an obligation to assign, by virtue of their employment obligations, to the Trustees of the University of Pennsylvania. These assignments have been properly recorded at the United States Patent and Trademark Office.

Applicants note that the basis for the 102(e) rejection, and the primary reference in the two 103(a) rejections, Wilson et al, US Patent 5,856,152, falls under the provisions of 35 USC 103(c) and is not available as prior art. MPEP 706.02(l)(2). Notably the present application was filed after November 29, 1999 and the Wilson et al, '152, only qualifies as prior art under 35 USC 102(e).

#### **Corresponding PCT Application of Record**

It is further noted by Applicants that the International Application corresponding to Wilson et al, '152, (WO 96/13598, May 8, 1996), was cited in the IDS dated March

26, 2003. The comments provided herein distinguish over both the '152 patent and its corresponding international publication ["Wilson et al"].

Claims 1, 2, 9, 11, 14, 14, 21-24 are rejected under 35 USC 102(e) as being anticipated by Wilson et al., US 5,856,152. Claims 3-8, 10, 12, 13, and 16-20 are rejected under 35 USC 103(a) as being unpatentable over Wilson et al, in view of Alkhatib *et al*, *J. Virol.*, 62(8):2718-27 (1988) and Fields *et al*. Virology, Vol. 2, 3<sup>rd</sup> edition, 1995, Philadelphia: Lippencott Williams and Wilkins, page 21831.

Applicants respectfully traverse this rejection for the reasons of record and for the reasons set forth herein.

There is no recognition in the combined teachings of the prior art that the adenoviral E1a, E1b and E2a gene products are the *minimal* adenovirus sequences necessary for production of rAAV.

Wilson et al describes the use of an E1a, E1b-deleted hybrid adenovirus (Ad) containing an AAV insert to produce rAAV. The hybrid Ad/AAV of Wilson et al is capable of infecting a host cell *and contains at least the adenoviral 5' and 3' ITRs and the adenovirus 5' packaging enhancer domain, packaged in an adenoviral capsid.*

Wilson et al contains no teaching or suggestion of a system for producing recombinant AAV that lacks adenoviral functional genes other than E1a, E1b, and E2a. [It is noted that the ITRs recited in the claims of the invention are AAV - ITRs, which differ significantly in sequence and function from those of adenovirus.]

The combination of the secondary references with Wilson et al fails to suggest the present invention. Notably, Alkhatib also provides a hybrid adenovirus, i.e., a viral particle having an adenoviral capsid, adenoviral ITRs, and other functional adenoviral gene sequences. Fields does not teach or suggest that rAAV can be produced in the absence of an adenoviral particle, or in the absence of any adenoviral vector having adenoviral ITRs.

Applicants respectfully request reconsideration and withdrawal of the present invention.

The undersigned invites the examiner to telephone, if doing so will expedite allowance of the present application.

The Director of the US Patent and Trademark Office is authorized to charge any fees due to Deposit Account 08-3040.

Respectfully submitted,  
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